

ENTERED

☐ Changed a file from non-ASCII to ASCII

☐ Changed the margins in cases where the sequence text was "wrapped" down to the next line.

☐ Edited a format error in the Current Application Data section, specifically: _____

☐ Edited the Current Application Data section with the actual current number. The number inputted by the applicant was ☐ the prior application data; or ☐ other _____

☐ Added the mandatory heading and subheadings for "Current Application Data".

☐ Edited the "Number of Sequences" field. The applicant spelled out a number instead of using an integer.

☐ Changed the spelling of a mandatory field (the headings or subheadings), specifically: _____

☐ Corrected the SEQ ID NO when obviously incorrect. The sequence numbers that were edited were: _____

☐ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited: _____

☐ Corrected subheading placement. All responses must be on the same line as each subheading. If the applicant placed a response below the subheading, this was moved to its appropriate place.

☐ Inserted colons after headings/subheadings. Headings edited included: _____

☐ Deleted extra, invalid, headings used by an applicant, specifically: _____

☐ Deleted: ☐ non-ASCII "garbage" at the beginning/end of files; ☐ secretary initials/filename at end of file; ☐ page numbers throughout text; ☐ other invalid text, such as _____

☐ Inserted mandatory headings, specifically: _____

☐ Corrected an obvious error in the response, specifically: _____

☐ Edited identifiers where upper case is used but lower case is required, or vice versa.

☐ Corrected an error in the Number of Sequences field, specifically: _____

☐ A "Hard Page Break" code was inserted by the applicant. All occurrences had to be deleted.

☐ Deleted **ending** stop codon in amino acid sequences and adjusted the "(A)Length:" field accordingly (error due to a PatentIn bug). Sequences corrected: _____

☒ Other: inserted hard returns globally; globally corrected spelling of "Pseudomonas"



PCT09

RAW SEQUENCE LISTING

DATE: 05/28/2002

PATENT APPLICATION: US/09/673,605A

TIME: 20:01:34

Input Set : A:\PTO.txt

Output Set: N:\CRF3\05282002\I673605A.raw

pp 6-9

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4 <110> APPLICANT: The President and Fellows of Harvard College
6 <120> TITLE OF INVENTION: REGULATION OF BIOFILM FORMATION
9 <130> FILE REFERENCE: 00246/505003
11 <140> CURRENT APPLICATION NUMBER: 09/673,605A
12 <141> CURRENT FILING DATE: 2000-10-17
14 <150> PRIOR APPLICATION NUMBER: 60/102,870
15 <151> PRIOR FILING DATE: 1998-10-02
17 <150> PRIOR APPLICATION NUMBER: 60/083,259
18 <151> PRIOR FILING DATE: 1998-04-27
20 <160> NUMBER OF SEQ ID NOS: 49
22 <170> SOFTWARE: FastSEQ for Windows Version 4.0
24 <210> SEQ ID NO: 1
25 <211> LENGTH: 1090
26 <212> TYPE: DNA
27 <213> ORGANISM: Pseudomonas fluorescens
29 <220> FEATURE:
30 <221> NAME/KEY: variation
31 <222> LOCATION: (1)...(1090)
32 <223> OTHER INFORMATION: n is a, t, c, or g.
34 <400> SEQUENCE: 1
W--> 35 gagcgacgna gaggaagn gn gggagganga ggaaggagga gagnggaaga agggggggaag 60
W--> 36 gggagggggg aaggagagn ggggagnngg gggnatnngg gannngggng gggngngggn 120
W--> 37 ntgnntatna tnanctccg gccggacgaa gaaattcccg atgcattgct cgagcgcgta 180
W--> 38 ggccgtgtctc gggacaaggt caaccacgta ttcagcaaag tgctcnaggc ggaantgctg 240
W--> 39 ctgcgcgaac tggcctcgca ntccagccac ggctgaatag gctcgcccgg tcatttgatc 300
40 tttccacgc tctgcgtggg aatgcacccc gtgacgctct gcgtcacatc tcagaagcgg 360
W--> 41 aacgcggagc gtccctggcg acnttccnc ncagggagcg tggggaaccn ancaaacntg 420
W--> 42 gtccctcgca ttntaaagt ttctcttaaa ancttcttnc gggcttccag ggtattttgg 480
W--> 43 tccanccccc ttgggaaccc anatccccc ggcggccccg ggttgcccn tttgatcctg 540
W--> 44 gggattccga ctttgttct tgnaaatccc cccttccatt gaaaccnccc angtttngcc 600
W--> 45 ttttgtttcc ctttgggccc ntncaatcc gntgnggcaa aaacgcccac tanggggng 660
W--> 46 gggcggtccc ccccccneg nntgttactn aantncanaa cgccnnttg gccanaaann 720
W--> 47 tcnctngng nnnnnncnnc gncntctttn ctnccttcc nnnctntnt cctcngtgta 780
W--> 48 tntccaante ntncnncgc cntcncgccc tccccactnc ctngccctc cnnncnncg 840
W--> 49 cgttncattn ctccnccntn ntccgcttnt cccctttan cgtngccgtt ncccgccegn 900
W--> 50 nncnnngtca tcnntgncgc tcttccnccc nccctgtccn cccantgccc ngnnnctccg 960
W--> 51 aggtcgnggg tctcncnccc nccngnttgc tgcncnggcn cmngatcccg ttcncncng 1020
W--> 52 nccntnatgc tgaccagtnn gngngngtng nnnccctccc tcnagnacntg tntngngggg 1080
W--> 53 gggccncccc 1090
55 <210> SEQ ID NO: 2
56 <211> LENGTH: 277
57 <212> TYPE: DNA
58 <213> ORGANISM: Pseudomonas fluorescens

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Input Set : A:\PTO.txt

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60 <220> FEATURE:
61 <221> NAME/KEY: variation
62 <222> LOCATION: (1)...(277)
63 <223> OTHER INFORMATION: n is a, t, c, or g.
65 <400> SEQUENCE: 2
W--> 66 ggnnggggngng ggncttgtgt ataaatntca ggctctgaca tccaggccgc aggcggcctg 60
W--> 67 gtcccnatgg ttatcgacca ntccgcccgc ggcnangtg cctatnanat ctactcncgt 120
W--> 68 ctgctcaang aacgcgtcat ctttctgggtg ggcccggtaa aagactacat ggccnacctg 180
W--> 69 atctgtgcgc aactnttgtt ccttgaancc naaaacccgn acnaggatat ccactcttat 240
W--> 70 atcaacnccc cnggtactag ttcaacccgt gaaaaaa 277
72 <210> SEQ ID NO: 3
73 <211> LENGTH: 819
74 <212> TYPE: DNA
75 <213> ORGANISM: Pseudomonas fluorescens
77 <220> FEATURE:
78 <221> NAME/KEY: variation
79 <222> LOCATION: (1)...(819)
80 <223> OTHER INFORMATION: n is a, t, c, or g.
82 <400> SEQUENCE: 3
W--> 83 gctngtgtct acgntcagc aanaatgccg cccgcgacna caacncttaa tcngetgaaa 60
W--> 84 ntccattgga tgatgtcca cccgtccatc cnancctgga agccaggatt nctgcccgc 120
W--> 85 atnanggtnc ggggtggcaac aatctcaccg naacctgnnc ctgtgggtcac aancgagggtt 180
W--> 86 caggtcacca cggncgtccc ggcaccggtt gcccncctgg tcaggccggg ccagggnncg 240
W--> 87 gtngccccag angtcnatcc tccctttgac cctnaancng acccgcnca tgcntggcna 300
W--> 88 ccnttgcntt tggcaatgga ccngggngga catnttncg cccgctatcc agggcnac 360
W--> 89 ccaanantac ngccccggcg tccctctann ntntactatt cnacgcgtgg gcananntgc 420
W--> 90 cctngtngg cttncctttc tcttccccgn cncctntttt tccccnnntt tttttgncgc 480
W--> 91 gncccctctt cnntccctnc cttccnncnn cctcgtctn nnnccctngt gggcctcnc 540
W--> 92 cttttntcct tcttccnncn ttttcttcg tgccctnct ctctgnttcc ncnngtngc 600
W--> 93 gtccggttan cccagcctcg ctctccnccg ctgnngcnet ctcttttctt gcttctctt 660
W--> 94 cctgtggcc ctntgcgatc ncnncanctt ctctcgtctn nggtcncanc cttngtntc 720
W--> 95 cgcnnngnc gncnncctnc tctngcncn nntcgtctt cgtnnncnng tncnncnncn 780
W--> 96 ncagtcnngt gtngnnagnt tnnecnagtn tgnnatecc 819
98 <210> SEQ ID NO: 4
99 <211> LENGTH: 832
100 <212> TYPE: DNA
101 <213> ORGANISM: Pseudomonas fluorescens
103 <220> FEATURE:
104 <221> NAME/KEY: variation
105 <222> LOCATION: (1)...(832)
106 <223> OTHER INFORMATION: n is a, t, c, or g.
108 <400> SEQUENCE: 4
W--> 109 gatgggtatcg gtnactcggg caccgctggg gtgggtgctcg gaacagggtc tcgaagtcc 60
110 cgccagtggc cttatogatg ctgacttcaa ctttgcccgc gtctttgtag acgtcgtctt 120
111 ttggtgcgtc gacagtcaag gtgcccggcg tggcgcccgc agcgatgttg atcaccgcgc 180
112 cgttgctcag ggtcacagtg acaggcgagc ccgcggcggtt ggtcaagggtt gcggtgtaaa 240
113 cgatcgaacc gccttcgcga acgctatcgg ttgcaactca agtcaggccg gtagtgtcct 300
W--> 114 gaatgtctgt nanngtgggtg tcnccggggg tggcgctcan gtccaatatt tcataattnc 360
W--> 115 nacctggggg tcttccannt tnannctcaa gttatcgccc ccccccaaag gtcctttng 420

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W--> 116 cgtnacnaaa ttcaccgann cccanctggc nccnaaccgg aanggtgang gtctgggccc 480
W--> 117 ttcnaacang gttmnataac caaacggaac ntcgggtcac cggtttcntt taacngaagg 540
W--> 118 nggtgttnna accnccgnc cnccttccgg ccaangngng aaattnnccg gtgggnggaa 600
W--> 119 aanaggtcna ngtttttnaan gggtttccng tnancntcnt nnncccnan ggntttnttn 660
W--> 120 ntnanaaacc aaanctcnc ngaatttnc nccnggtngg nttttnnccg nannnnngaa 720
W--> 121 nttnnngggg gggnnnnccn ntcctttgtt tnnaaaatna nncnttttng ggnccnnnc 780
W--> 122 naaaagggnc anngnggnc cnnntggggn ggnnccnnn gggnccnaag nt 832

```

124 <210> SEQ ID NO: 5

125 <211> LENGTH: 1054

126 <212> TYPE: DNA

127 <213> ORGANISM: Pseudomonas fluorescens

129 <220> FEATURE:

130 <221> NAME/KEY: variation

131 <222> LOCATION: (1)...(1054)

132 <223> OTHER INFORMATION: n is a, t, c, or g.

134 <400> SEQUENCE: 5

```

W--> 135 cncaanggc cagagcacag gatatgcngc aatctcatgg acaaacggcg ccagcccnat 60
W--> 136 ggaggccacc gacnccacat ccgtcgcgcc ggctcgcttg aggcncgcca acgcancctc 120
W--> 137 aagggtctgc gccanttgca ncnctncctc gncaccanc cnnagttgcc agcncncaa 180
W--> 138 actccccacc ncaanncnc ntnacnaaat nntgggtttc cgnataccgc ccncactcac 240
W--> 139 gcaccaattg ctcaccncg gcctgaacna actggtcggt ncnctncccg ccccatcnc 300
W--> 140 tggttnaaac nggcnattc cttnaccccc agcaacancn aataaccggg acctggccan 360
W--> 141 cncggggtng ctcaccggg cattaaactg cattttcaaa atatnnccgg ttggccacgc 420
W--> 142 ccgtnaggtt gtctgtntag gatecnaccc ccantttcnc tntgcccctn ggntgtntcn 480
W--> 143 nggaanngnn ccntgagctt tctcgaccat ctgggtttct tntcntgcn cccactcncg 540
W--> 144 nnncaagttt taaggtnntn nctccgggna atcctctnng gcnannnctt naactgnaaa 600
W--> 145 ctccnccga acngggncct aanantagnc ctatnngggg nnacnngcgt tgnccaaccn 660
W--> 146 aactntttt tttcccagc cgcggggctn ttcaagtct tgaacgnaac tcctcnngtc 720
W--> 147 nttccacang gnetcccccc tantntntaa ccgcgtntcn tctatnttgg gngtccccgn 780
W--> 148 ntncatacat gnengagtan aagaagctn ancctccna nnnngntctc cgcccccaa 840
W--> 149 tttntccct ctctccctt nanctctaa atatattctt tnttgggnnt naanaagggg 900
W--> 150 ggcgcanaaa nacctntctc cggggggggg tgtgggncct nnanaaacc cctttctnt 960
W--> 151 tntnncccc cctccnggg ggctccncc tccctntttg ttttcccnc ctannaatcc 1020
W--> 152 ctactcncg gntagttga aaaaacanna acgc 1054

```

154 <210> SEQ ID NO: 6

155 <211> LENGTH: 880

156 <212> TYPE: DNA

157 <213> ORGANISM: Pseudomonas fluorescens

159 <220> FEATURE:

160 <221> NAME/KEY: variation

161 <222> LOCATION: (1)...(880)

162 <223> OTHER INFORMATION: n is a, t, c, or g.

164 <400> SEQUENCE: 6

```

W--> 165 ncnacgnnt ngnaagtgat caggccnatt aaacnnntga cnaaannaga acangnnggt 60
W--> 166 ctgttactac tcttcaagac caacccaagn cgaccgtgna tagcngncc tntacgcagc 120
W--> 167 atcngttccn catttagatt nntatccatc cntaagtctt nccgggtcag aacgntnctt 180
W--> 168 gacgtacaac ccatanngcg ggggtannngg nnatttttng ctacctnca tgttttgaa 240
W--> 169 gncnntnnc cntttaatng gnagcnncn ncangcnncn ggggattatt acnactcnac 300
W--> 170 ccntgganaa cnttgccact acngcnggnc ccccgcnngg tccnggnctc cctgcccac 360

```

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DATE: 05/28/2002

PATENT APPLICATION: US/09/673,605A

TIME: 20:01:34

Input Set : A:\PTO.txt

Output Set: N:\CRF3\05282002\I673605A.raw

```

W--> 171 ttcccttgtc tcccgnccctc tntnccccct tttncgctcn ncttctgggtg tncgnttccc 420
W--> 172 ctccccccng tcctcnttca ncnctnngcg tctngggcac ctngnecgnnc tcttccctnc 480
W--> 173 tgccccctct nccccccntt cgtntancec cctctctcna cntncttcat cccgtccctn 540
W--> 174 ttcttntctc cncctnccn cctntccta ntccntctgt cccnctnecn tcntcgtctn 600
W--> 175 cctnccnccn ttntcgactt cnnctgttg nccnccccgc ngngncttct ctngtcttct 660
W--> 176 cccgtcngcn gctcagnncc cntccttccn ttctnctnn ctgtccgnen gcgnnccgtg 720
W--> 177 nctnccgncc cctagnnngg ncgcgcctcn gcnncctcgt cccnngntnt nntctttctg 780
W--> 178 cncctgtgctc nntnttctnt tntcnctcgt cccatccnct nctctntnn nncgtngntt 840
W--> 179 ccncttctag gncennattc cnannncngg ccnttncccc 880

```

181 <210> SEQ ID NO: 7

182 <211> LENGTH: 779

183 <212> TYPE: DNA

184 <213> ORGANISM: Pseudomonas fluorescens

186 <220> FEATURE:

187 <221> NAME/KEY: variation

188 <222> LOCATION: (1)...(779)

189 <223> OTHER INFORMATION: n is a, t, c, or g.

191 <400> SEQUENCE: 7

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W--> 192 ncaanncaga tcctgnaaaa cgggaaaggt tccnttcagg tacgctactt gtgtataaaa 60
W--> 193 gtcagggcc aaacgcccc ggtgcaacaa ctggtcnaag gctacntggc gggttacaac 120
W--> 194 cgtgcgctgg tcnaacgcaa ggccaaaggc ctgcccnaac aatgtgccag cnaatgggta 180
W--> 195 cggccgatca cggcgctgga cctgggtcaag ttgacccgcc ggctgttggt ggaagggggc 240
W--> 196 gtcggccagt tcgccnangc cctggccggc gcgcaaccgc cccaggcnac cgcactcgcg 300
W--> 197 ggcaccccg gtcacgggtt cgcggccgcc gcaaccgcgc agcagcnttt tgccctgaaa 360
W--> 198 cgcggcaaca atgcnttggg ccacgcggcan cnaacgctcg ttcaatgggc cgttnggaat 420
W--> 199 ntttgcttgg caaaccccc atttttcccg ttgggttagg cggcattcct tttctnacca 480
W--> 200 naaagcacct gaaccattcc cgggcaanct tggaaattct tgggccccng ngcctgccaa 540
W--> 201 ttttgccnaa aaatcaanat cggtttcaac canccnctt gcctggaacc aaaccgtcaa 600
W--> 202 aaactccaaa aaaattcccc cttncnctt gcaatcnntc naagaaccaa cctttttttn 660
W--> 203 ccaaggnatt ttttttcna naaacncaa angntttnt naattttacn acttaaggcc 720
W--> 204 anttnnaaag tncccaattt tttanngtcc aatttgnccc nattttaaag gctccgggtt 779

```

206 <210> SEQ ID NO: 8

207 <211> LENGTH: 848

208 <212> TYPE: DNA

209 <213> ORGANISM: Pseudomonas fluorescens

211 <220> FEATURE:

212 <221> NAME/KEY: variation

213 <222> LOCATION: (1)...(848)

214 <223> OTHER INFORMATION: n is a, t, c, or g.

216 <400> SEQUENCE: 8

```

W--> 217 gccnnnncn nattatncaa gntctaagtg ttnnaccana tnccaaggac ataatgactt 60
W--> 218 ncttttatta antgtccgga ccatnccata tncaaccgtg canaccgtna acttnaccca 120
W--> 219 ncatgnctcc gcntgtcgta tttatanncc ccataagctt cccccgtcag aacgttncaa 180
W--> 220 taggtacant natactgcnc ggcnatggc attttggctt tctttatggt nggnagtctn 240
W--> 221 aacagccttt ttatggagcg tccacagcta tagggggaaa ntctatttca acnctggcna 300
W--> 222 aantttgaaa aactnaganc ttcnnnggtt tataggggta tcccntgacc aaannccnct 360
W--> 223 aattccnaen ctttgnctcc acttccctcc tngcgcgnct ttaccnngng ccccgccct 420
W--> 224 tccccnngn ncntnggnca cngggggaaa ngnnntcncc ccgtggtttt ctcccnctcn 480
W--> 225 tngnnnnncc tegtgnntcc cggnnccctn cccccngtt cggaaactnt ctccccnctn 540

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RAW SEQUENCE LISTING

DATE: 05/28/2002

PATENT APPLICATION: US/09/673,605A

TIME: 20:01:34

Input Set : A:\PTO.txt

Output Set: N:\CRF3\05282002\I673605A.raw

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W--> 226 cccnccgcgng tgcgtctnnn tnncccnngn tncnccngnt tncnccngcn cnttttcctc 600
W--> 227 cccccccccc ttanccngga nccctctccc tncgcntggc cngccccccn ggncctctcc 660
W--> 228 ctntnccctc ggngncncnc gncgncctcc ttncnttctg cctcctccnn cntcnctc 720
W--> 229 cncctntncc nntcccnccc ctctnnntc cccctgccc nnnncnccgg cnttctgntc 780
W--> 230 ctcnnnnnnn tncctgngcc cgcgtgcnch gtngcgnccc gctntcctgc ctgtcncccc 840
W--> 231 cccncccc 848
233 <210> SEQ ID NO: 9
234 <211> LENGTH: 533
235 <212> TYPE: DNA
236 <213> ORGANISM: Pseudomonas fluorescens
238 <220> FEATURE:
239 <221> NAME/KEY: variation
240 <222> LOCATION: (1)...(533)
241 <223> OTHER INFORMATION: n is a, t, c, or g.
243 <400> SEQUENCE: 9
W--> 244 tatttggtgta taagntcagc gccagcagtg accgatgtca ccgataccat cgacaccagc 60
245 accgtttcgc tcacagcgac ttcgacggtg gccgaagggtg ggactgtcgt ttacaccgcc 120
W--> 246 tcgggttaacg caccgcgtgac cgacgcctccg ttgggttatca ccctgttcca aacggccana 180
W--> 247 ccactnccat tccgggttggg gccagcancn gcaccgtgaa cttcgtgaca ccaaaccgacg 240
W--> 248 ccctcgcggg cggcgataac ctgagcgtga agattgatga cgccaagggt ggcaattacn 300
W--> 249 aaaaactgga catcgacgcc accccggcgg acaccaccgt taccgatntg caggacacta 360
W--> 250 ccggcctgac cttgantgca accgatagcg ttgctgaang cggntcgatc gtttacaccg 420
W--> 251 caacattgac caacgccncc ggntcgctg tcnctgtnac cctgaacaac ngngcgggtga 480
W--> 252 tcaacatccc tgcgggngtt tcccccccg tncntantcta cacgngngaa aaa 533
254 <210> SEQ ID NO: 10
255 <211> LENGTH: 591
256 <212> TYPE: DNA
257 <213> ORGANISM: Pseudomonas fluorescens
259 <220> FEATURE:
260 <221> NAME/KEY: variation
261 <222> LOCATION: (1)...(591)
262 <223> OTHER INFORMATION: n is a, t, c, or g.
264 <400> SEQUENCE: 10
265 tgattgtgta taagatcagc cagcaaggcg ccgtcgtcgg gttggtaaag ccccaccagc 60
W--> 266 aacttgcca gggaactctt gcccgagccg ctgcggccaa tgatgccnat tttctcgccc 120
W--> 267 ggcttganca ccaggtnat attctacacc tngggnttct gctgggttcgg anaaatnaaa 180
W--> 268 nttcaactna nngnattcca acggccctt ccagaacttt cnggtcangg ggngctcntc 240
W--> 269 caaattgcgc tcttggggca gctccntcat ctggctgana ganatcttgg tcccccccc 300
W--> 270 ctggttggtat cgggtcntca ngcccnacaa cnaaaccaac nggctgaggg cgcgaccgct 360
W--> 271 gaacatntnt cangcgacca nccccccnt gctcangcna ccggcgatna tcaagtntac 420
W--> 272 nccnaaaana anatgaccac cccngccagt tncctggatca acaaagtgat gttctttgcc 480
W--> 273 nggcgggana acatcttcac ccccanttct aagcggctga aggtgccgat agtctgttcc 540
W--> 274 cncgtgtatt ggcgtnccnc cccccntact antcaacnch tggnaaaaaa a 591
276 <210> SEQ ID NO: 11
277 <211> LENGTH: 1249
278 <212> TYPE: DNA
279 <213> ORGANISM: Pseudomonas fluorescens
281 <220> FEATURE:
282 <221> NAME/KEY: variation

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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/673,605A

DATE: 05/28/2002
TIME: 20:01:35

Input Set : A:\PTO.txt
Output Set: N:\CRF3\05282002\I673605A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; N Pos. 9,18,20,28,44,80,87,88,94,97,98,103,104,105,109,114,116,119
Seq#:1; N Pos. 120,121,124,129,132,134,226,235,261,383,389,391,410,412,418
Seq#:1; N Pos. 433,452,459,485,502,530,563,587,592,597,621,623,632,635,653
Seq#:1; N Pos. 659,678,681,682,690,693,695,698,705,706,715,719,720,724,727
Seq#:1; N Pos. 729,731,732,733,734,735,736,738,739,742,744,750,753,757,761
Seq#:1; N Pos. 762,763,766,768,769,775,782,788,791,793,796,797,803,807,819
Seq#:1; N Pos. 823,824,832,833,834,837,838,845,850,855,858,860,861,869,875
Seq#:1; N Pos. 880,884,891,900,901,902,904,905,906,913,914,917,927,931,940
Seq#:1; N Pos. 945,950,951,953,954,955,968,975,978,981,984,986,994,996,1000
Seq#:1; N Pos. 1002,1003,1014,1016,1019,1021,1024,1026,1039,1040,1042,1044
Seq#:1; N Pos. 1046,1049,1051,1052,1053,1063,1065,1068,1072,1074,1076,1087
Seq#:2; N Pos. 3,8,9,13,27,66,81,94,97,106,108,117,129,175,195,208,211,220
Seq#:2; N Pos. 223,247,252
Seq#:3; N Pos. 4,15,23,39,45,53,61,92,94,111,123,125,129,151,158,159,173
Seq#:3; N Pos. 194,216,237,238,243,252,256,274,277,279,287,289,294,299,303
Seq#:3; N Pos. 308,323,327,334,337,356,358,365,367,371,389,390,391,393,402
Seq#:3; N Pos. 414,416,417,425,428,434,450,452,456,466,467,468,477,482,486
Seq#:3; N Pos. 492,493,499,506,508,509,510,513,520,521,522,523,528,538,546
Seq#:3; N Pos. 558,560,564,578,586,591,593,595,598,610,627,634,635,638,644
Seq#:3; N Pos. 656,673,681,683,685,687,700,701,706,709,715,718,724,725,727
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Seq#:3; N Pos. 769,772,775,776,777,778,780,781,787,788,793,795,796,799,802
Seq#:3; N Pos. 803,806,810,813,814
Seq#:4; N Pos. 13,311,313,314,323,340,359,361,365,378,379,382,384,385,419
Seq#:4; N Pos. 424,427,439,440,445,451,454,463,469,484,489,494,495,511,528
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Seq#:5; N Pos. 2,6,10,28,58,74,105,116,135,141,143,146,153,159,162,163,174
Seq#:5; N Pos. 177,191,193,196,197,199,201,203,206,211,212,223,233,258,269
Seq#:5; N Pos. 281,283,286,299,306,311,316,324,338,340,360,362,369,405,406
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Seq#:5; N Pos. 747,757,760,766,772,780,781,783,792,794,800,810,812,819,821
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Seq#:5; N Pos. 1014,1015,1027,1029,1032,1048,1049
Seq#:6; N Pos. 1,3,4,8,9,11,13,27,35,36,37,42,46,47,54,56,57,90,99,106,108

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/673,605ADATE: 05/28/2002
TIME: 20:01:35

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Seq#:6; N Pos. 856,862,864,865,866,868,873,876
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Seq#:10; N Pos. 108,128,138,152,156,172,177,181,189,191,192,194,222,228,233
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RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/673,605ADATE: 05/28/2002
TIME: 20:01:35

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Output Set: N:\CRF3\05282002\I673605A.raw

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Seq#:12; N Pos. 298,345,346,347,349,352,359
Seq#:13; N Pos. 18,23,29,33,39,41,43,53,62,64,77,78,85,88,100,104,106,113
Seq#:13; N Pos. 114,116,117,128,137,141,145,146,150,153,161,165,168,171,174
Seq#:13; N Pos. 181,182,193,200,201,202,203,209,211,218,220,223,225,228,230
Seq#:13; N Pos. 237,252,262,268,269,270,286,293,297,303,311,316,319,324,328
Seq#:13; N Pos. 335,336,356,362,368,370,372,383,389,405,407,410,414,418,420
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Seq#:13; N Pos. 488,491,492,495,499,537,546,548,559,572,580,583,587,588,599
Seq#:13; N Pos. 607,610,621,624,625,636,663
Seq#:14; N Pos. 16,21,32,36,38,50,51,61,68,87,92,97,100,104,112,130,131,137
Seq#:14; N Pos. 153,166,170,171,173,183,189,209,215,237,241,251,254,257,260
Seq#:14; N Pos. 261,267,272,274,275,278,281,282,285,288,298,300,304,310,319
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Seq#:14; N Pos. 475,476,481,484,493,500,504,506,512,514,518,531,535,538,541
Seq#:14; N Pos. 544,549,554,559,573,575,576,577,581,582,586,589,591,592,593
Seq#:14; N Pos. 595,599,600,607,608,609,610,611,619,625,626,628,629,636,639
Seq#:14; N Pos. 640,641,644,645,649,650,654,655
Seq#:15; N Pos. 26,31,34,35,37,41,59,60,64,70,75,77,82,88,93,101,106,115
Seq#:15; N Pos. 120,121,123,130,132,140,143,150,151,154,157,158,159,168,174
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Seq#:15; N Pos. 1126,1131,1146,1148,1150,1153,1161,1165,1167,1179,1184,1185
Seq#:15; N Pos. 1197,1199,1202,1204,1207,1214,1218,1220,1223,1232,1239,1245
Seq#:15; N Pos. 1251,1253,1254,1258,1267,1276,1280,1284,1285,1288,1289,1291
Seq#:15; N Pos. 1301,1307,1313,1326,1327,1329,1332,1337,1339,1340,1344,1354
Seq#:15; N Pos. 1361,1368,1369,1378,1393,1402,1404,1409,1410,1414,1417,1422
Seq#:15; N Pos. 1430,1433,1437,1438,1440,1444,1446,1454,1456,1469,1471,1478
Seq#:15; N Pos. 1480,1485,1486,1487,1494,1505,1507,1508,1514,1515,1525,1530
Seq#:15; N Pos. 1532,1540,1546,1548,1555,1557,1558,1568,1574,1579,1582,1586
Seq#:15; N Pos. 1590,1591,1598,1614,1615,1620,1621,1627,1628,1634,1635,1638
Seq#:15; N Pos. 1649,1652,1656,1659,1661,1667,1669,1671,1672
Seq#:16; N Pos. 2,26,31,35,38,41,51,72,81,82,86,94,100,101,102,108,110,111
Seq#:16; N Pos. 115,128,137,142,143,153,155,170,172,177,178,179,184,190,193
Seq#:16; N Pos. 194,198,201,204,208,209,210,212,219,224,227,229,232,235,246
Seq#:16; N Pos. 251,258,262,263,266,267,277,279,281,291,295,299,302,303,307

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/09/673,605A

DATE: 05/28/2002
TIME: 20:01:35

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Seq#:16; N Pos. 392,397,404,407,414,417,430,431,437,440,441,442,443,444,448
Seq#:16; N Pos. 465,468,471,472,476,486,493,497,505,508,510,520,522,525,532
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Seq#:16; N Pos. 668,670,677,681,685,688,689,693,694,696,697,702,703,707,708
Seq#:16; N Pos. 709,710,716,717
Seq#:17; N Pos. 3,4,5,7,8,9,10,12,25,33,36,40,43,44,50,61,69,70,73,74,77,78
Seq#:17; N Pos. 93,104,106,116,128,157,162,163,165,169,174,177,178,181,184
Seq#:17; N Pos. 187,188,195,196,197,201,208,216,217,220,221,227,230,244,256
Seq#:17; N Pos. 260,262,265,266,274,281,282,293,298,303,307,310,327,333,334
Seq#:17; N Pos. 341,348,354,357,360,367,369,373,377,383,385,393,394,397,399
Seq#:17; N Pos. 406,407,408,409,420,435,441,443,445,446
Seq#:18; N Pos. 2,15,21,25,45,49,65,66,67,74,78,84,89,94,95,98,101,105,106
Seq#:18; N Pos. 107,108,115,116,126,129,132,133,144,152,159,167,174,175,178
Seq#:18; N Pos. 184,185,199,208,210,220,221,224,227,229,235,236,247,248,251
Seq#:18; N Pos. 253,258,260,265,270,275,277,281,291,292,299,305,319,326,333
Seq#:18; N Pos. 339,344,345,353,356,368,380,396,406,411,412,414,418,422
Seq#:19; N Pos. 15,42,45,47,52,98,99,101,107,108,114,126,135,136,138,143
Seq#:19; N Pos. 145,147,153,154,160,172,190,211,244,262,264,266,269,271,273
Seq#:19; N Pos. 277,292,294,304,312,321,322,324,328,331,335,336,337,351,353
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Seq#:20; N Pos. 173,177,199,201,204,206,207,209,210,211,212,216
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Seq#:23; N Pos. 358
Seq#:24; N Pos. 2,15,29,40,49,51,58,64,66,67,68,74,93,97,101,116,120,124
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